

Do you deploy oil boom to contain harbor oil spills?

Would you like to improve this process in the following areas?

- *Meet environmental compliance regulations*. Improve equipment readiness and performance during spill event response operations required by oil spill response plans.
- *Improve workers' safety and health*. Reduce potential for boom handling injuries.
- *Increase productivity*. Improve response efficiency at activities that regularly deploy and retrieve boom.
- *Save money*. Reduce cleaning and maintenance costs for response boom. Reduce procurement costs by extending service life.



Boom Reel at Naval Station Mayport

Oil boom reels, rollers, and storage systems can be used to significantly extend the service life of response boom. Operations such as oil and fuel transferring, and ship readiness preparation can inadvertantly result in spill events at Navy installations. On-water spills usually result in costly cleanups if not contained adequately. Preventative booming of ships in the harbor eliminates the potential spread of oil and fuels in the event of a spill. The Navy harbor Oil Spill Response Program uses over 650,000 feet of oil boom for spill response and confinement operations. Response oil boom left in the water needs to be periodically cleaned and repaired at activity cost. Boom not maintained, repaired, and cleaned can fail to contain oil during a spill even though it is deployed. A boom reel allows responders to more easily maintain boom readiness and effectiveness. Tier I initial response (30 to 60 minutes) will be improved and completed with less personnel. This technology is being used at Naval Shipyard Portsmouth, Naval Station Mayport, and Naval Air Station Pensacola. This equipment is available to eligible activities through the Navy Oil Spill Response Program.

How can you achieve these improvements?

Use oil boom service life extension equipment, such as boom reels, rollers, containers, and storage systems.

How does this equipment work?

Boom service life extension equipment permits storage of response boom out of the water and out of the elements. Boom stored on a reel can potentially last 2 to 3 times longer than boom left in the water.

How will this equipment save you money?

Boom maintenance and cleaning costs will be reduced. Boom procurement and replacement costs will be reduced. Personnel costs for handling boom deployment and recovery will be reduced.

Typical Process Flow Diagram PROCESS NAMES MATERIALS WASTE PRODUCTS Hydraulic oils **Fueling Operations** Spilled oils and fuels **Diesel fuels** Oil and Fuel Transfers **Used response boom Navy JP fuel Equipment Maintenance** Oil response boom

How can this P2 technology eliminate or reduce pollution?

This P2 technology extends the service life of boom material used for spill containment. Implementation will result in the following pollution reductions:

- Reduce the amount of boom material that must be disposed of as solid or oily waste.
- Reduce the amount of cleaning products and energy required for boom maintenance.

Which facilities can benefit most from this technology?

This technology can be used at on-water activities that regularly deploy and retrieve response boom. Typical facilities include:

- Naval Stations
- Naval Shipyards
- Naval Air Stations
- Naval Supply Facilities
- Naval Weapon Stations
 Fleet Industrial Supply Centers

How can this technology reduce regulatory compliance concerns?



This technology can provide increased equipment readiness and performance during preventative booming deployments and during unexpected spill events. Implementation of this technology will improve an activity's ability to meet the following regulatory compliance requirements:

- Comply with legal requirements of the National Contingency Plan, Clean Water Act, and Oil Pollution Act of 1990 that prohibit oil spills.
- Provide Navy Tier 1 response equipment to meet initial response for on-water spills.
- Support response readiness as stated in facility, area, and regional response plans.

Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by using pollution prevention technologies and methods to reduce compliance requirements. This fact sheet is one in a series designed to encourage activities to use pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

For additional information, contact:

More information can be found at the Oil Spill Response Program web page (URL: http://enviro.nfesc.navy.mil/ps/oilspill/oilspill.htm).

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